



# **Second Annual Oversight Report of the Decentralized Gateway Vehicle Inspection Program**



**MISSOURI**  
DEPARTMENT OF  
NATURAL RESOURCES



**Missouri State  
Highway Patrol**

## **Introduction**

Pursuant to paragraph 643.337.2, RSMo, the Missouri Department of Natural Resources and the Missouri State Highway Patrol (MSHP) are issuing a joint annual report to the General Assembly on the status of the oversight measures implemented for the decentralized Inspection/Maintenance program--the Gateway Vehicle Inspection Program (GVIP). This report summarizes GVIP compliance and incidents of discovered fraud during the 2009 Fiscal Year (July 1, 2008-June 30, 2009). This report also provides our joint recommendations for oversight improvements to the GVIP.

## **Background**

The GVIP is a federally required air pollution control strategy in the St. Louis ozone nonattainment area, comprised of Franklin, Jefferson, St. Charles, and St. Louis counties, and the City of St. Louis. The GVIP strives to reduce ground-level ozone-forming emissions from passenger vehicles and trucks by accurately identifying vehicles that have emission problems and requiring their repair prior to registration renewal. Ground-level ozone is a strong oxidizing chemical. When inhaled, it can affect lung function, especially in the young, the elderly and those with respiratory illnesses such as asthma, emphysema, and bronchitis.

The Missouri Air Conservation Commission (MACC) promulgated 10 CSR 10-5.381, "*On-Board Diagnostics Motor Vehicle Emissions Inspections*," effective August 30, 2007. This rule established the state regulations that the Department and MSHP currently use to oversee and enforce the GVIP inspection requirements with assistance from SysTech International (STI), the state's contractor. The Department is the lead agency with respect to emissions inspections and the MSHP is the lead agency with respect to safety inspections. The GVIP began collecting vehicle emissions and safety inspection data on October 1, 2007.

## **Station Licensing**

During FY2009, the MSHP licensed 690 public and 20 private or government GVIP stations. The MSHP also licensed approximately 4,000 inspector/mechanics. For a current list of licensed GVIP stations, visit our website at: <http://www.dnr.mo.gov/gatewayvip/repair/index.html>.

## **Vehicle Inspection Data**

Each licensed GVIP station performs vehicle inspections using at least one Missouri Decentralized Analyzer System (MDAS). The MDAS sends real-time inspection information from the inspection stations directly to the GVIP Vehicle Inspection Database (VID). The Department, MSHP, Department of Revenue (DOR) and local license offices all have access to the VID through secure, dedicated Internet connections.

During FY2009, GVIP stations collected 701,761 emissions inspection records and 778,638 safety inspection records. GVIP also collected 28,824 emissions inspection failure records, a 4.11% emissions failure rate, and 89,229 safety inspection failure records, an 11.46% safety failure rate. The Department issued 606 cost-based repair waivers and 120 technical waivers (described below). GVIP data indicates over 80% of vehicles failing the emissions inspection received repairs to pass the emissions test or did not register in the program area.

### *Emissions waivers and Exemptions*

The Department is responsible for issuing Cost-Based and Out-of-Area waivers, and Mileage-Based Exemptions. Just like inspection results, Department issued waivers or exemptions are available for real time verification by the DOR contract license offices and online registration system via the VID.

- *Cost-Based waivers* – granted by the Department if a motorist spends a specified amount on emissions-related repairs (after failing the emissions inspection), which still do not enable a vehicle to pass the emission test. During FY2009, the Department issued 606 Cost-Based waivers.
- *Out-of-Area waivers* – granted by the Department for vehicles taxed within the ozone nonattainment area but not used in the area during the registration period. For FY2009, the Department issued 392 out-of-area exemptions.
- *Reciprocity (Technical) waivers* – granted by the Department for vehicles located in another state and which passed an equivalent emission inspection in that state. For FY2009, the Department issued 120 Reciprocity waivers.
- *Mileage Based Exemptions* – granted by the Department for vehicles documented to fit into the mileage waiver criteria. For FY2009, the Department issued 1,511 Mileage-Based Exemptions.
- *Extensions* – granted by the Department or the DOR for vehicles located in another state at the time of registration renewal, provided they undergo testing within 10 days of returning to Missouri or for vehicles that fail the emissions test for unset readiness monitors. For FY2009, the Department issued 437 Extensions.

### **Data Oversight Methods**

#### *Real Time Inspection Data/Paperless Inspection Verification*

Each MDAS unit connects to the VID using a dedicated Internet connection. Upon completion of a vehicle inspection, the MDAS software uploads the inspection data to the VID, where it becomes immediately available to the Department, MSHP, STI, DOR, contract license offices and the online registration system for inspection verification. This allows license offices to quickly identify fraudulent vehicle inspection reports (VIRs) and report them so an immediate investigation may begin. This investigation includes determining the source of the fraudulent VIRs (and prosecution, if warranted) and requiring legitimate inspections for the vehicles.

#### *Bulletin Messaging and Documents Menu*

Each MDAS unit includes a messaging system that allows the Department, MSHP and STI to contact GVIP stations, individually or collectively, to inform inspector/mechanics about inspection procedures, billing reminders, and software updates. Each MDAS unit is also equipped with a Documents Menu, which stores and prints GVIP regulations and fact sheets, as well as comment, waiver and exemption forms. This simplifies the distribution of public information to inspection stations and to vehicle owners.

#### *Consumer Protection Technical Service Contracts*

Cost-based waivers allow a vehicle to register and operate in a failing condition for up to two years. Therefore, the GVIP contains consumer protection to ensure emissions repairs are appropriate and beneficial. Through negotiated contracts, the Department retains the services of approximately 300 vehicle repair facilities, which employ Missouri Recognized Repair Technicians (MRRT). An MRRT

is an individual certified by the National Institute for Automotive Service Excellence in A6, A8, and L1 with an understanding of what causes a vehicle to fail an emissions test. These facilities serve as Consumer Protection Technical Service Centers to:

- Review vehicles and prepare receipts to ensure repairs performed are cost-effective and appropriate for the emissions failure.
- Diagnose vehicles already repaired but showing no signs of improvement.

For FY2009, the Department authorized the review of 36 vehicles by one of these Centers.

As a result of the MRRT program, the Department is able to deny Cost-Based Waiver requests if the reviews show that repairs were not necessary or were not performed as billed. Many times, the Department works with the shops that performed the initial repairs either to reimburse the motorist or to provide additional free repairs. The MRRT analysis and review is also able to provide motorists with accurate diagnostic information on how best to repair their vehicle to pass the emissions test. In either case, the MRRT program has reduced the number of Cost-Based waivers, thereby minimizing the emissions from waived vehicles while also maximizing the number of fully repaired vehicles.

### **Equipment Oversight Methods**

#### *Laptop Audit Computers with Wireless Internet Access*

Department and MSHP auditors receive laptop computers that contain both MDAS lane software and customized auditing software. These laptops allow auditors to securely access the VID and conduct audits with or without Internet access. Department and MSHP auditors are also able to review inspection records for all stations and inspector/mechanics while in the field. Once an audit is complete, Department and MSHP staff managers can immediately review audit results and generate summary audit reports from the VID.

#### *Digital Cameras*

Each MDAS unit includes a detachable digital camera. The MDAS software requires licensed inspector/mechanics to photograph the rear license plate, vehicle identification number (VIN), and the odometer. The inspector/mechanic attaches these photographs to the vehicle inspection record on the VID where it is available for review and comparison to the inspection report.

#### *Fingerprint Readers*

Each MDAS also includes a fingerprint reader. The software requires licensed inspector/mechanics to scan one finger prior to beginning each inspection. This fingerprint scan must match the scan stored on the MDAS for that individual in order to proceed with the inspection. Fingerprint readers in combination with the trigger reports described below have dramatically improved enforcement efficiency by documenting and pinpointing the inspector/mechanics conducting improper inspections.

### **Enforcement**

#### *Station Inspections*

The Department and MSHP conduct overt and covert inspections of GVIP stations. Department covert inspections involve six vehicles altered to fail in order to assess the test effectiveness and to prevent test station fraud. For FY2009, Department staff conducted 549 overt audits and 47 covert audits of GVIP stations and MSHP staff conducted 2,461 audits.

### *Trigger Reports*

Once uploaded to the VID, the inspection data becomes available to the Department, MSHP, DOR and STI via an Internet-based Reporting Suite. The auditing laptop computers also have access to this reporting software. The Reporting Suite contains general informational reports along with “trigger reports” that automatically identify emissions or safety inspection patterns inconsistent with state regulations. As soon as improper inspections occur, the trigger report compiles the evidence into a report used to initiate an investigation. For example, the *OBD VIN Mismatch Report* and the *Protocol Mismatch Report* revealed “clean scanning” violations occurring at several stations. Clean scanning is the illegal act of connecting the MDAS cable to a vehicle other than the vehicle photographed and identified on the vehicle inspection report, with the intent of bypassing the required test procedure. By comparing the VIN entered by the inspector/mechanic with the VIN that the vehicle reported through the system, the report efficiently identifies individual inspector/mechanics who have clean scanned vehicles.

Inspection fraud activities such as clean scanning are a violation of the Clean Air Act for which the U.S. Attorney’s Office can prosecute. The Department and MSHP collaborate with the U.S. Environmental Protection Agency’s Criminal Investigation Division and the U.S. Attorney’s Office on investigations of vehicle inspection fraud and inspection document falsification.

On September 24, 2008, a federal grand jury indicted three inspector/mechanics from two inspection stations, American Automotive Sales & Service and Sure Start Tire and Battery, with Clean Air Act violations. The courts charged these individuals with intentionally conducting fraudulent vehicle emissions inspections via clean scanning. These three inspector/mechanics received sentences in 2009 with judgments ranging from four months of home confinement with an additional one year of probation to 10 months in prison.

### *Equipment Lockouts and License Suspensions/Revocations*

The Department and MSHP have the ability to apply an electronic “lockout” which removes the permission of an individual inspector/mechanic or an entire GVIP station from using their MDAS. For FY2009, the Department and MSHP initiated lockouts for 324 stations and 378 MDAS units for various reasons including no or poor quality photographs, non-payment of fees, and/or violations. The removal of a lockout occurs upon the completion of the license suspension.

In addition to having their MDAS systems locked out, inspection stations conducting improper inspection activities have had their inspection licenses suspended for up to one year or revoked entirely. To date, MSHP suspended 27 inspector/mechanic licenses for clean scanning violations. During FY2009, MSHP suspended or revoked the following station licenses:

- **Access Automotive** (9373 Page Avenue, St. Louis)  
-Station and inspector/mechanics suspended for 180 days.
- **Clark Tire and Wholesale** (4539 Old Highway 21, Imperial, Jefferson County)  
-Station and inspector/mechanics revoked for one year; possible Federal prosecution.
- **Emmendorfer's Service, Inc.** (8750 St. Charles Rock Rd, St. John, St. Louis County)  
-Station and inspector/mechanics revoked for one year.
- **Gerry's Automotive Services** (4459 West Florissant Avenue, St. Louis)  
-Station and inspector/mechanics suspended for 180 days.

- **Krone's Auto Repair, Inc.** (1725 Washington, Florissant, St. Louis County)  
-Station and inspector/mechanics suspended for 180 days.

The Department and MSHP are currently investigating additional GVIP stations and inspector/mechanics for improper inspection activities.

### **Oversight Results**

The GVIP prevents attempts of document registration fraud by investigating and identifying individuals who are producing fraudulent vehicle inspection reports. The GVIP implemented an improved auditing system streamlining the Department and MSHP oversight of vehicle emissions and safety inspections. The combined effect of the integrated oversight methods described above is that the Department and MSHP can cost-effectively audit, detect, enforce, and further prevent emissions and safety inspection fraud.

### **Recommendations for the Future**

The Department continually strives to improve our ability to detect fraud and ensure data integrity. We are moving forward with developing improvements to the GVIP, which include:

- Integrating a VIN decoding program, as opposed to a vehicle look up table program, to enhance the accuracy of the vehicle data in the database. This will allow for a more accurate assessment of whether an issue is with the GVIP software/hardware or with a particular make/model of vehicle.
- A method to ensure a vehicle only passes the emissions portion of the test with specific catalytic converter (a key component of the vehicle's emission reduction system) components.

### **Conclusion**

In summary, the GVIP oversight measures described in this report are working as designed and, as the program matures, will have an even greater potential for compliance and enforcement capabilities. The Department and MSHP will continue to ensure compliance with state vehicle inspection statutes and rules, remove violators from the program, and work for the public health and safety by overseeing an inspection program with proven value and integrity. Lastly, both agencies will continue working with STI to enhance the oversight tools needed so the Department and MSHP can identify violations and improve enforcement capabilities.